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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,778	07/24/2003	Yoshinari Morimoto	116571	8193

25944 7590 03/10/2005

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EXAMINER	
HUFFMAN, JULIAN D	

ART UNIT	PAPER NUMBER
2853	

DATE MAILED: 03/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/625,778	MORIMOTO, YOSHINARI	
	Examiner	Art Unit	
	Julian D. Huffman	2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *11 and 12* is/are allowed.

6)☒ Claim(s) *1-3,5,6 and 10* is/are rejected.

7)☒ Claim(s) *4 and 7-9* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *9/17/04, 7/24/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

2. Claim 5 is objected to because of the following informalities:

The second line of claim 5 is unclear.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 5, 6 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Takahashi et al. (U.S. 6,454,390 B1).

With regards to claim 1, Takahashi et al. discloses an ink jet printer comprising:

a printing unit having a carriage and a print head (fig. 5) in which a plurality of ink jet nozzles are arranged in plural columns (fig. 6b), the printing unit printing on a printing medium while reciprocating the print head by the carriage for go-printing and return-printing (column 39, lines 5-9);

a sensor (fig. 8) disposed on the carriage (column 20, lines 58-60) and having a light-emitting portion (31) for emitting light toward the printing medium and a light-receiving portion (32) for receiving reflected light from the printing medium;

a test pattern printing control unit (fig. 9, elements 100, 150) that causes the printing unit to print a test pattern in which vertical ruled lines are arranged with a prescribed pitch (fig. 37);

a plural patterns printing instructing unit that causes the printing unit to print a plurality of test patterns while changing a test pattern printing interval of the return-printing with respect to the go-printing in plural stages (controller 100, fig. 37, column 39, lines 5-9);

a best pattern detecting unit for scanning-in the printed test patterns with the sensor and for automatically selecting a best test pattern from the scanned-in test patterns (30); and

a best pattern printing instructing unit that causes the printing unit to print best test pattern related information on the printing medium (controller, column 41, lines 45-50).

With regards to claim 2, Takahashi et al. discloses that the best pattern printing instructing unit causes the printing unit to print an additional test pattern on the printing medium at a test pattern printing interval that produces the best test pattern as the best test pattern related information (column 41, lines 45-50).

With regards to claim 3, the best pattern printing instructing unit causes the printing unit to print information indicating a test pattern printing interval that produces the best test pattern as the best test pattern related information (column 41, lines 45-50).

With regards to claim 5, the sensor is detectable at least one of a front end, a rear end, and a width of the printing medium (since sensor is mounted on carriage it may detect any portion of paper).

With regards to claim 6, Takashi discloses:

a detection result judging unit for judging whether a detection made by the best pattern detecting unit is appropriate (controller 100, column 17, lines 14-32 and column 33, lines 28-36); and

a re-detection executing unit that causes the printing unit to print the plurality of test patterns again while changing a printing condition and causes the sensor to scan the printed test patterns again when the detection result judging unit judges that the detection made by the best pattern detecting unit is not appropriate (controller 100, column 33, lines 38-43 and column 33, lines 38-43).

With regards to claim 10, Takahashi et al. discloses an ink jet printer comprising:

a printing unit having a carriage and a print head (fig. 5) in which a plurality of ink jet nozzles are arranged in plural columns (fig. 6b), the printing unit printing on a printing medium while reciprocating the print head by the carriage for go-printing and return-printing (column 39, lines 5-9);

a sensor (fig. 8) disposed on the carriage (column 20, lines 58-60) and having a light-emitting portion (31) for emitting light toward the printing medium and a light-receiving portion (32) for receiving reflection light;

a plural patterns printing instructing unit that causes the printing unit to print a plurality of test patterns in each of which vertical ruled lines are arranged with a prescribed pitch, while changing a test pattern printing interval of the return-printing with respect to the go-printing in plural stages (controller 100, fig. 37, column 39, lines 5-9);

a best pattern detecting unit for scanning-in the printed test patterns with the sensor and for automatically selecting a best test pattern from the scanned-in test patterns (30); and

a best pattern printing instructing unit that causes the printing unit to print best test pattern related information on the printing medium (controller, column 41, lines 45-50).

Allowable Subject Matter

5. Claims 4 and 7-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 11 and 12 are allowable.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian D. Huffman whose telephone number is (571) 272-2147. The examiner can normally be reached on 9:30a.m.-6:00p.m. Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JH
5 March 2005

Thinh Nguyen
Primary Examiner
Technology Center 2800